

**Methane Hydrate Advisory Committee (MHAC) Meeting**  
**October 12, 2011**  
**1:00 p.m. – 3:45 p.m. (EDT)**  
**U.S. Department of Energy**  
**1000 Independence Avenue, SW**  
**Washington, DC 20585**

**Introduction**

The teleconference meeting was called to order at 1:00 p.m. by Christopher Smith, Deputy Assistant Secretary for Oil and Natural Gas in the U.S. Department of Energy (DOE) and Designated Federal Official (DFO) for the Committee. He welcomed the new committee members and thanked them for addressing the challenging but beneficial opportunities presented by methane hydrate. At this point, the DFO was required to leave the meeting for other obligations, and appointed Guido DeHoratiis as Acting DFO. The meeting agenda is attached (Attachment 1).

**Committee Business**

The Acting DFO called the roll and confirmed that eleven members were present, which qualified as a quorum (Attachment 2 is the meeting attendance record of Committee Members present and all others in attendance). Mr. DeHoratiis introduced Lou Capitanio as the new Program Manager of the Methane Hydrate Program at DOE, and then proceeded to request nominations for a new Chair of the Committee. Mary (Missy) Feeley and Peter Flemings were both nominated by other Committee members. Following questions by the nominees, the Acting DFO gave an overview of the responsibilities of the Committee and the Chair. The Committee then decided that a Vice Chair position would be created and filled by the nominee that did not win the Chair vote.

Dr. Feeley won the vote five to four, with both members abstaining. Dr. Feeley was made Chair of the Committee, with Dr. Flemings serving as Vice Chair. At this point, Committee business was closed, and the Acting DFO introduced Ray Boswell, the Technical Manager for Gas Hydrates at the National Energy Technology Laboratory (NETL).

**Presentation: State of the Methane Hydrates R&D Program – Ray Boswell, NETL**

Dr. Boswell outlined the statutory goals given by Congress when establishing the program with the National Methane Hydrates Research and Development Act of 2000. This includes assessing gaps in knowledge related to the resource base, economics, risks, environmental impacts, and exploration and production technologies. He reported that a 2010 study by the National Research Council found the R&D Portfolio to be well managed and of high quality, which has “enabled significant progress towards the Program’s long-term goals.”

Dr. Boswell then reviewed the individual projects currently being pursued by the Program, as well as the challenges, including funding, progress, and accomplishments achieved in the last several years. Following the first part of this review, he halted his presentation to allow Helen

Farrell to provide a detailed presentation on one of the projects funded by the Program. He noted that he would conclude his review of the Program's work following her presentation.

**Presentation: CO<sub>2</sub>/CH<sub>4</sub> Hydrate Exchange Field Trial – Helen Farrell, ConocoPhillips**

Dr. Farrell reviewed the history and progress made by the Ignik Sikumi demonstration well project, located at the Prudhoe Bay operating unit (PBU) on the North Slope of Alaska. The project seeks to conduct a field trial of CO<sub>2</sub>-CH<sub>4</sub> exchange technology. In the previous winter, an ice pad was constructed and the well was drilled. As the weather warmed, the well was suspended, with testing intended to occur in the winter of 2011-2012. The methodology of the testing program was presented which includes the investigation of both CO<sub>2</sub>/CH<sub>4</sub> hydrate exchange and depressurization processes. Following completion of the field trial in the winter of 2011-2012, a final report is expected to follow in approximately one year.

**Break**

Following a short break, the Acting DFO took a second roll call and determined that a quorum was still present. Several Committee members noted that they would need to leave early, and it was concluded that the meeting would end at 3:45 p.m. to accommodate them.

**Presentation: State of the Methane Hydrates R&D Program (continued) – Ray Boswell, NETL**

Dr. Boswell continued his overview of the R&D Program by discussing the Gulf of Mexico Joint Industry Project (JIP), which is conducted by a coalition of international industry partners, universities, and U.S. government agencies. The JIP has conducted a variety of field programs, and is currently developing technologies to retrieve and analyze pressure-core samples to better study gas hydrates in the Gulf.

Dr. Boswell also reviewed the international work conducted by the Program which has focused on partnerships with India, Korea, and Japan. He also reviewed the outreach work conducted by the Program, which includes participation in a United Nations environmental review, attendance at multiple conferences, and publishing work in peer-reviewed journals.

**Committee Discussion**

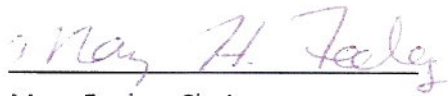
Upon completion of his presentation, Dr. Boswell opened the floor for questions. A Committee member asked for clarification on the budget situation, as Mr. DeHoratiis explained that the Fossil Energy (FE) Program received zero funding in Fiscal Year 2011. He noted that while the FE methane hydrate program was not funded, partial funding for the 2012 testing phases of the Alaska Ignik Sikumi project was obtained from DOE's Office of Science through their funding of NETL's Field Work Proposal. The remainder of the needed funding was obtained via agreement between ConocoPhillips and JOGMEC.

Discussion next moved to what the next steps of the Committee should be. The Acting DFO noted that the decision was up to the Committee, but a fall 2012 meeting would be ideal as the preliminary results from the Ignik Sikumi project would be available at that time. He also noted that the Committee could assign a subcommittee to investigate a particular issue of its choosing. The Chair noted that she would follow up with the Committee on these issues.



**Closing**

The Acting DFO noted that the meeting was open for public comment, but no requests were made. Finally, at 3:45 p.m. the newly elected Chair officially closed the meeting.

A handwritten signature in purple ink, reading "Mary H. Feeley", written over a horizontal line.

Mary Feeley, Chair

A handwritten signature in black ink, reading "Christopher A. Smith", written over a horizontal line.

Christopher A. Smith, Designated Federal Officer

**Methane Hydrate Advisory Committee Meeting**  
**October 12, 2011**  
**1:00 p.m. – 4:00 p.m. (EDT)**  
**U.S. Department of Energy**  
**1000 Independence Avenue, SW**  
**Washington, DC 20585**

**AGENDA**

12:30 p.m. – 1:00 p.m.	Registration	
1:00 – 1:30	Welcome and Introductions	Christopher Smith, DAS for Oil and Natural Gas, and the Designated Federal Officer (DFO)
1:30 – 2:00	Committee Business	Guido DeHoratiis, Director, Oil and Gas Research
2:00 – 2:15	Overview of DOE Methane Hydrate Program	Ray Boswell, Technology Manager, Methane Hydrates, National Energy Technology Laboratory (NETL)
2:15 – 3:45	<ul style="list-style-type: none"><li>• Report and Discussion on Work in Alaska</li><li>• Report and Discussion on Work in Gulf of Mexico</li><li>• Report and Discussion on International Activities; NETL Methane Hydrate Fellowship; Outreach; National Laboratories, NETL, and Interagency Program aspects</li></ul>	Helen Farrell, ConocoPhillips Ray Boswell, NETL Ray Boswell, NETL
3:45 – 4:00	Public Comments, if any	DFO
4:00	Wrap up and Adjourn	Chairman of the Methane Hydrate Advisory Committee

**Methane Hydrate Advisory Committee Meeting**  
**October 12, 2011**  
**1:00 p.m. to 4:00 p.m.**  
**Attendance Record**

**Advisory Committee Members**

Dr. Thomas Blasingame, Texas A&M University (SGE)  
Mr. Richard Charter, Resources Legacy Fund Foundation  
Mr. Marlan Downey, Roxana Oil Company  
Dr. Mary Feeley, ExxonMobil Exploration Company  
Dr. Peter Flemings, University of Texas at Austin (SGE)  
Dr. David Goldberg, Lamont Doherty Earth Observatory (SGE)  
Dr. Miriam Kastner, Scripps Institute of Oceanography (SGE)  
Dr. Carolyn Koh, Colorado School of Mines (SGE)  
Dr. Craig Shipp, Shell International Exploration and Production, Inc.  
Mr. Robert Swenson, Alaska Department of Natural Resources  
Dr. Anne Trehu, Oregon State University (SGE)  
Dr. Joseph Wilder, University of Akron

**U.S. Department of Energy**

Christopher Smith  
Guido DeHoratiis  
Lou Capitanio  
Trudy Transtrum  
Ray Boswell  
Richard Baker  
Nick Woodward, Office of Basic Energy Sciences

**Methane Hydrate Technical Coordinating Team**

Gene Smith, National Oceanic and Atmospheric Administration  
Rick Coffin, Naval Research Laboratory

**Other Organizations**

Helen Farrell, ConocoPhillips  
Kevin Y Pekarek, United States Coast Guard

**IBM (Support Contractors)**

Rob Matey  
Brian Sullivan